

IN THE CLAIMS:

1. (Cancelled)

2. (New) A method of producing a heavy protective coating on a metal or metal alloy valve part which exhibits high adhesion on said valve part by micro-arc oxidation, the method comprising;

placing said part in an electrolyte on a current-conducting holder,

producing a working voltage between said part and said electrolyte and

increasing the voltage until a micro-arc discharge is originated on the surface of the part

and

wherein the current-conducting holder has a coating selectively formed thereon at the air-electrolyte interface and wherein the coating comprises an electroinsulating material that prevents current reduction to the part as the voltage is increased.

3. (New) A method according to claim 2 wherein the valve part is made of a metal or metal alloy selected from the group consisting of aluminum, titanium, tantalum and alloys thereof.

4 (New) A method according to claim 2 wherein the electrolyte comprises potassium hydroxide.

5 (New) A method according to claim 2 wherein the current-conducting holder is made from aluminum wire.